

TO: Tim Benetti, Community Development Director

FROM: Evan Acosta, Assistant City Engineer

DATE: March 28, 2025

SUBJECT: Rockport Mixed Use Business Campus Comprehensive Plan Amendment

Tim,

The following are comments regarding the Rockport Mixed Use Business Campus Comprehensive Plan Amendment.

The City Engineer provided a memo to the applicant on 3/13/2025 requesting additional materials to complete the City's review. The remaining materials to be submitted and reviewed are:

- Additional escrow funds to complete various engineering review tasks (separate correspondence from Tim Benetti to Oppidan)
- Photometric plan with construction (temporary) light conditions
- Information requested for noise study review:
 - Provide additional detail from the baseline conditions monitoring - hourly L10 and L50 values if available, in particular nighttime 1-hour L50 values. (The report currently rolls those up into combined 24-hour values for L10 and L50)
 - Provide an anticipated generator maintenance testing schedule/frequency/duration.
 - Figures 4-6: Provide alternate figure versions zoomed out to include the modeled noise footprint out to ~40 dBA, and/or the underlying GIS layer(s) for the modeled noise contours. Relatedly, could they please confirm the plotted contour tiers are 5 dBA intervals.
 - Provide a shapefile for information contained in Figure 2 of the Stormwater Management Memorandum (12/17/2024).
- Provide renderings or architectural drawings with dimensions of all proposed above ground surge tanks and water storage tanks

The requested land use changes in the comprehensive plan amendment are directly related to the Technology Park application. The above listed information is necessary to complete engineering review of both the comprehensive plan amendment and the Technology Park.

Water Usage – Current Conditions

Under the current (in effect) 2040 Comprehensive Guide, the City identified that it will need to supply 19.1 Million Gallons per Day (MGD) of treated water. The current treatment limitations of iron and manganese will require infrastructure improvements to reach the 19.1 MGD, which the City is responsible for achieving. Similarly, the City is committed to the treatment of PFAS up to 19.1 MGD.

Comprehensive Plan Amendment Scenarios

The City utilized a hydraulic modeling consultant, AE2S, to complete advanced modeling of its water and sanitary sewer system to analyze the impacts of the proposed land use changes. A number of scenarios are present in the modeling and they are summarized below:

Scenario 1: Comprehensive Plan -2040: Calculations based on the 2040 Comprehensive Plan land use allocations

Scenario 2: Without Data Center: Calculations based on actual constructed uses, where feasible, and 2040 Comprehensive Plan allocations where development has not yet occurred.

Scenario 3: With Data Center: Calculations based on the Technology Park site plan on the east side of Future Johnny Cake Ridge Road with 2040 Comprehensive Plan allocations on the west side of Future Johnny Cake Ridge Road

Scenario 4: Data Center + Data Center East of JCRR: Calculations based on the Technology Park site plan on the east side of Future Johnny Cake Ridge Road with a future data center occupying a portion of the MBC land use area on the west side of Future Johnny Cake Ridge Road (See exhibit 4A).

Alternate Scenarios: Additional scenarios were modeled to benchmark the differences between the 2040 Comprehensive Plan and the current application. These are included in the technical memorandums.

Water Usage – Comprehensive Plan Amendment

The City utilized a hydraulic modeling consultant firm, AE2S, to complete advanced modeling of its water system to analyze the impacts of the proposed land use changes. The specific site information for the Technology Park site plan was used for the area East of future Johnny Cake Ridge Road. Water intensive potential uses were modeled on the west side of future Johnny Cake Ridge Road.

The findings from water modeling are attached in a Technical Memorandum and the results are summarized below.

Planning Scenario	Water System				
	Maximum Day Demand (MDD) (gpd)	Difference		Required WTP Capacity	
		(gpd)	(gpm)	(gpd)	(MGD)
Scenario 1: Comprehensive Plan - 2040	1,166,784	NA	NA	19,090,000	19.1
Scenario 2: Without Data Center	1,207,471	40,687	28.3	19,130,687	19.1
Scenario 3: With Data Center	1,426,927	260,144	180.7	19,350,144	19.4
Scenario 4: Data Center + Data Center east of JCRR	1,604,047	437,263	303.7	19,527,263	19.5

As highlighted in the table above, the water modeling indicates that future buildout under the proposed comprehensive plan amendment would exceed the 2040 Comprehensive Plan water treatment capacity. Mitigation will be required to achieve the proposed land use allocations.

Sanitary Sewer Usage – Comprehensive Plan Amendment

The City utilized a hydraulic modeling consultant firm, AE2S, to complete advanced modeling of its sanitary sewer system to analyze the impacts of the proposed land use changes. The specific site information for the Technology Park site plan was used for the area East of future Johnny Cake Ridge Road. Sewer intensive potential uses were modeled on the west side of future Johnny Cake Ridge Road.

The findings from the modeling are attached in a Technical Memorandums and the results are summarized below.

Planning Scenario	Wastewater System					
	Peak Hourly Flow (PHF) (gpd)	Difference		Average Day Flow (ADF) (gpd)	Difference	
		(gpd)	(gpm)		(gpd)	(gpm)
Scenario 1: Comprehensive Plan - 2040	1,405,677	NA	NA	390,466	NA	NA
Scenario 2: Without Data Center	1,534,452	128,775	89.4	438,415	47,949	33.3
Scenario 3: With Data Center	1,783,233	377,556	262.2	964,787	574,321	398.8
Scenario 4: Data Center + Data Center east of JCRR	1,966,077	560,400	389.2	1,301,938	911,472	633.0

The sewer modeling indicates that the sewer system at full buildout under the proposed comprehensive plan amendment would exceed the 2040 Comprehensive Plan Numbers. Mitigation may be required to reduce peak sewer flows. Profiles are attached within the Technical Memorandum for a graphical view of the surcharge risk in each scenario.